NATIONAL ENERGY BOARD

A Report to the Minister
Covering Certain Matters Relating to

THE PRICING OF NATURAL GAS IN THE DOMESTIC MARKET

Pursuant to Subsection 22(2)
of the National Energy Board Act

Phase II of an Application by
TransCanada PipeLines Limited
Under Part IV of the National Energy Board Act

November 1981

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26 November 1981

The Honourable Marc Lalonde, P.C., M.P.,
Minister of Energy, Mines and Resources

Dear Sir:

In accordance with the provisions of subsection 22(2) of the National Energy Board Act, we are pleased to submit this report in response to your request that the Board inquire into and report on the necessity for developmental prices for natural gas in the domestic market, and any other matters relevant to the pricing of natural gas in the domestic market.

The findings and recommendations contained in this report result from a public hearing conducted by the Board at which submissions were received from producers, transmission companies, distributors, associations, certain provinces, and other interested parties from across Canada. The views of submittors upon the issues under examination were of considerable assistance to the Board in preparing its report.

We hope you will find this report useful and we will be pleased to provide further clarification if required.

C.G. Edge
Presiding Member

R.B. Horner
Member

A.B. Gilmour
Member

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PART I

INTRODUCTION

1. Pricing Inquiry

The Minister of Energy, Mines and Resources, pursuant to Section 22(2) of the National Energy Board Act ("NEB Act"), requested that the Board, in conjunction with its hearing of the TransCanada PipeLines Limited ("TransCanada" or "TCPL") application and in view of his Policy Statement on Domestic Natural Gas Pricing of 14 April 1981, inquire into and report to the Minister on the necessity for developmental prices for natural gas in the domestic market and any other matters relevant to the pricing of natural gas in the domestic market.

By Order No. RH-4-81, as amended, the Board set down for public hearing the application made by TransCanada under Part IV of the NEB Act relating to its tolls and tariffs (Phase I) together with the inquiry under Part II of the NEB Act (Phase II).

Phase I was heard from 29 June 1981 to 17 July 1981. On 24 August 1981, the Board released its Reasons for Decision and issued Orders No. TG-3-81 and TG-4-81, by which the Board disposed of the issues pertaining to the application by TransCanada under Part IV of the NEB Act.

The Board conducted Phase II of the hearing as an inquiry under subsection 22(2) of the Act from 18 August 1981 to 2 September 1981. Detailed submissions were received from 16 of the 39 intervenors representing producers, transmission companies, distributors, associations, the provinces and other interested parties from across Canada (see Appendix I for list of Appearances).

The scope of the inquiry was outlined in the Board's memorandum to interested parties dated 4 June 1981 (see Appendix II). In that memorandum, parties were requested to focus upon the effects of developmental pricing on gas sales both in currently franchised areas and in new gas distribution areas serviced by the existing TransCanada pipeline system and by those pipeline facilities between Montreal and Quebec City authorized by Certificates of Public Convenience and Necessity No. GC-64 and GC-65. This report, therefore, does not examine the effect of developmental prices on the sales of gas in potential markets east of Quebec City. The Board, however, has no reason at this time to believe that results would be significantly different from those west of Quebec City.

The Board's memorandum also requested that parties address alternatives for setting differentials between zones for Contract Demand ("CD") service; for setting the demand charge component for the price of CD service; and for the setting of prices for Annual Contract Quantity ("ACQ") service, Small General Service ("SGS"), Authorized Overrun Interruptible ("AOI") service, Temporary Winter Service ("TWS"), and Peaking Service ("PS").

While the primary focus of the inquiry was upon "pricing" issues, evidence was placed on the record on the effect of various capital assistance programs for the extension of distribution systems (see Appendix III).

2. Background

Petroleum Administration Act

Part III of the Petroleum Administration Act ("PAA") deals with the pricing of natural gas which enters into interprovincial and international trade. Where an agreement is made with a producer-province under Section 50 of the PAA, the Governor in Council may, by regulation, prescribe the prices at which gas produced in that province is to be sold on, or for, delivery in any areas or zones in Canada outside that province or at any points on the international boundary of Canada. Where Section 52 is proclaimed in force, the Governor in Council may prescribe prices for gas produced in a producer-province that enters interprovincial or international trade in those situations where there is no effective agreement with that province under Section 50. Section 63 of the PAA provides that prices prescribed under Part III of the PAA are to prevail in the event of any conflict with prices established under Part IV of the NEB Act.

From 1 November 1975 to 31 October 1980, prices for natural gas produced in Alberta were prescribed under Section 51 of the PAA on the basis of various agreements made with the Government of Alberta on mutually acceptable gas prices. Under these agreements, the prices of gas produced in Alberta for consumption in Canada outside that province were based on the Toronto Reference Price, which was the price for CD service gas at 100 percent load factor at Toronto. The Toronto Reference Price for gas was fixed, on an equivalent energy basis, at approximately 85 percent of the price of Canadian crude oil at Toronto.

Under these agreements, the cost of gas produced in Alberta for consumption in Canada outside that province was fixed with reference to the Alberta border. The "imputed Alberta border price" was defined in the agreements to be an amount equal to the Toronto Reference Price minus the cost of transporting gas under CD service at 100 percent load factor from the Alberta border to Toronto, as determined by the Board.

Between 1 November 1975 and 1 September 1981, the prices prescribed for gas produced in Alberta and sold in the different zones on the TransCanada pipeline system for consumption in Canada, have been equal to the aggregate of the imputed Alberta border price plus the cost of transportation on the TransCanada system from the Alberta border to the respective delivery zones. The transportation component of those prices was fixed using tolls determined by the Board under Part IV of the NEB Act for the various services in each zone on the TransCanada system. The transportation tolls determined by the Board have been based upon an allocation of TransCanada's transmission cost of service on volumetric and distance factors to the different zones on the system.

The agreements with Alberta under Section 50 of the PAA on natural gas prices terminated on 31 October 1980. Effective 1 November 1980, the Governor in Council prescribed prices for gas produced in Alberta which entered interprovincial or international trade under Section 52 of the PAA. The National Energy Program ("NEP") of October 1980, the Minister's Policy Statement of April 1981

and the Federal/Alberta Memorandum of Agreement of September 1981 have introduced new factors which must be considered in determining prices for natural gas consumed in Canada east of Alberta. The significant features of those policies and that agreement respecting domestic gas pricing can be summarized as follows.

The National Energy Program, 1980

Two of the policy objectives of the NEP, the off-oil conversion policy and the natural gas pricing policy, were of major significance during the conduct of the pricing inquiry. The stated aim of these two policies is to create an environment for a rapid shift in the Canadian pattern of energy consumption away from oil to gas, electricity, renewable energy, and coal. This major goal, as stated on page 54 of the NEP, is:

> "To reduce the use of oil in each of the residential, commercial and industrial sectors in every province to no more than 10 percent of the total energy used in those sectors."

The off-oil conversion policy provides for a number of incentive programs aimed at achieving this particular goal. Among these are:

1. a conversion incentive program for consumers, providing a grant of 50 percent of the conversion cost, up to a maximum of $800, for conversions from oil to gas, electricity, renewable energy, and other energy sources;
2. the setting aside of $500 million by the Government of Canada to be used, if required, to support the extension of gas transmission systems to the Maritimes and to Vancouver Island; and

3. a distribution system expansion program providing market development bonuses to assist distributors in expanding their systems upon commitment by a provincial government to the ten percent oil use target and agreement that the gas price incentive be used in part to pay for gas pipeline expansion rather than simply passed on to existing consumers.

Policy Statement on Domestic Natural Gas Pricing

The Minister's Policy Statement on Domestic Natural Gas Pricing of 14 April 1981 provides guidelines based on the NEP for the pricing of domestic natural gas for all markets east of Alberta. Significant features of that policy statement have been summarized in the Board's August 1981 Reasons for Decision on Phase I of the hearing, respecting the TransCanada application and are repeated below.

"1. For the purpose of pricing, the existing TransCanada eastern zone will be extended to include the area to be served by the proposed TQ&M pipeline system in Quebec and the Maritime Provinces, with the result that gas prices in markets east of Toronto will be the same as the prices at the Toronto City Gate for the same types of gas service.

2. Natural gas prices on the TransCanada system in zones west of the eastern zone will be linked to the Toronto City Gate price, but will be somewhat lower recognizing lower transportation costs. More particularly, prices prescribed under Part III of the PAA will no longer be derived from rates developed under Part IV of the NEB Act, as is the case now.

3. There will continue to be a uniform imputed Alberta border price for all gas produced in Alberta and consumed in Canada outside that province, and for fuel used in transmission on the Great Lakes system for gas transported back to Canada. The policy statement sets out a new formula, however, for the determination of the imputed Alberta border price. The significant feature of this formula is that the TransCanada system and the proposed

TQ&M system are to be treated as one integrated pipeline for pricing purposes. In the formula, the cost of transmission and metering and all other costs associated with the movement of gas on the integrated TransCanada and TQ&M pipeline system are to be those costs approved by the Board."

The policy statement recognized that development prices may be necessary at least in new market areas to achieve the NEP objective of increased natural gas sales in Canada. The statement also noted that the Board would be asked to examine and report on this subject.

Federal/Alberta Agreement on Energy Pricing and Taxation

The Federal/Alberta Memorandum of Agreement relating to Energy Pricing and Taxation ("September Federal/Alberta Agreement") was signed on 1 September 1981, one day prior to the completion of the Board's pricing inquiry hearing. The Agreement addressed some of the issues raised during the hearing with respect to the reference price of natural gas, the price relationship of gas to oil and the funding of market development. In particular, the Agreement provides for the following measures:

- The reference price for all gas destined for domestic markets east of Alberta is established at the Alberta border, with scheduled increases of 23.301¢/GJ (25¢/MMBtu) commencing on 1 February 1982 and every six months thereafter for the five-year term of the agreement.
- The Natural Gas and Gas Liquids Tax ("NGGLT") on domestic sales will be established at the level so that, taking into account a range of factors, including gas transportation costs, there will be a parity relationship between the

wholesale price of natural gas at the Toronto City Gate and approximately 65 percent of the average price of crude oil at the Toronto Refinery Gate.

- The Government of Alberta will make Market Development Incentive Payments ("MDIP") to the Government of Canada over the period 1 November 1981 to 31 January 1987 to encourage the expansion of gas markets east of Alberta. The Government of Canada will determine the making of and the amounts of any payments to gas transmission utilities to assist in the extension of gas transmission into new domestic market areas east of Alberta and to gas distribution utilities to obtain new domestic markets east of Alberta. In addition, the Government of Canada will ensure that the MDIP will be used for capital expansions of distribution systems and for sales promotion programs and will not be used to effect general price cuts for natural gas.

On the closing day of the hearing, the Board had the September Federal/Alberta Agreement filed as an exhibit to provide submittors, in formulating their written argument, the opportunity to consider the contents of the Agreement with regard to the previously filed submissions.

PART II

FINDINGS AND RECOMMENDATIONS

This part of the report consists of five sections, namely:

1. Some broad observations on the natural gas pricing implications of the September Federal/Alberta Agreement.
2. General pricing considerations including the competition of natural gas with fuel oil and electricity, as well as tax matters.
3. Developmental prices to accelerate penetration of new market areas by natural gas.
4. Pricing matters related to various types of service in the TransCanada/Trans Québec & Maritimes Pipeline Inc. ("TQM") pipeline systems.
5. A more detailed review of how the new pricing system might operate east of Alberta.

1. Broad Observations on the September Federal/Alberta Agreement

On Page 7 of the September Federal/Alberta Agreement it is stated:

> "4. Natural Gas Prices
>
> (a) Prices
>
> During the term of this Agreement, natural gas destined for domestic markets east of Alberta shall be priced at the Alberta border. The Alberta border price in effect on September 1, 1981 shall be increased by 25 cents per Mcf commencing February 1, 1982 and thereafter shall be increased by 25 cents per Mcf every six months. The price will be converted to cents per gigajoule in the traditional manner determined by the National Energy Board."

This is a return to "Alberta border forward" pricing, as opposed to the "market back" system of regulation that was in effect from 1 November 1975 to 31 October 1981.

The Agreement goes on, at page 9:

> " It is the intention of the Government of Canada to establish the level of the NGGLT on domestic sales so that, taking into account a range of factors, including gas transportation costs, the parity relationship between the wholesale price of natural gas at the Toronto City Gate and the average price of crude oil at the Toronto Refinery Gate will be approximately 65%."

This means, in somewhat simplified terms, that:

the selling price of natural gas (established in the Agreement at approximately 65 percent of the price of crude oil)

minus

the Alberta border price (established in the Agreement)

minus

TransCanada's cost of CD Service in the Eastern zone at 100 percent load factor (authorized by the NEB)

equals

the Natural Gas and Gas Liquids Tax (a residual).

2. General Matters Relating to Gas Pricing

It was generally agreed by distributors that pricing of natural gas at approximately 65 percent of crude oil at the Toronto City Gate should enable gas to penetrate the market and displace fuel oil. No special natural gas price discounts as such were therefore needed.

There are, however, certain factors affecting the ability of natural gas to capture markets which require clarification. These relate to:

- competition from heavy fuel oil for the industrial market,
- competition from electricity for the residential markets in certain provinces,
- the effects of the Natural Gas and Gas Liquids Tax,
- provincial taxes in some cases on one fuel but not on others, and
- the fact that provincially-owned utilities do not pay income taxes.

Turning first to the competition from heavy fuel oil, submittors in general pointed out that displaced heavy fuel oil must be disposed of, and that, as a residual product, it would likely be priced down "to clear the market". In the Board's view, it is essential that the potential quantity of heavy fuel oil be reduced if natural gas is to penetrate the industrial market successfully, particularly in eastern Canada. This was clearly recognized in the NEP, but the specific measures required for it to be carried out need to be put in place. It was, however, beyond the scope of this inquiry to enumerate specifically what measures should be introduced and over what time frame.

Turning now to competition from electricity, it is a truism that if all costs were equal it would be preferable to use a renewable energy resource such as hydro-generated electricity rather than a non-renewable resource such as natural gas. In such circumstances, it would be inappropriate to subsidize natural gas in order to preclude the use of electricity.

In Manitoba there is an ample supply of hydro-generated electricity; residential electricity prices have been frozen until 1984, and it has been projected that by 1983 electricity prices will be lower than those for natural gas. In such circumstances, the Board questions whether subsidies for further natural gas penetration in that Province would be appropriate.

Quebec also has abundant supplies of hydro-generated electricity, but, except for Montreal and certain western sections of the province, Quebec has no natural gas distribution system at this time. However, electricity costs are rising in that province, and it appears that there is a role for both electricity and natural gas in the residential market.

Similarly, in Ontario there is a large hydro-electric component, but nuclear power plays a role, and imported United States coal is also used for generating electricity. Natural gas is expected to play a major role, but not to the total exclusion of electricity.

In the Board's view, it is desirable that federal and provincial governments formulate a policy for competing fuels in each region so that consumers will have a sound basis upon which to make rational fuel choices. Of the provinces east of Alberta, only Quebec has a retail tax on natural gas but is contemplating its removal. All except Ontario have provincial taxes in effect on electricity.

The problem of differing incidences of taxes on different fuels is complex and beyond the scope of this inquiry, although the Board recognizes that consumer choices will best be influenced to reflect the economics of producing different fuels by minimizing uneven incidence of taxes among alternative forms of energy.

3. Developmental Prices

The purpose of a developmental price is to accelerate the penetration of gas in the market place by offering an incentive to more aggressive marketing. A development price will generally provide a distributor with temporary relief from the contract demand charge by which the transmission company recovers its fixed pipeline costs.

In the opinion of the Board, a developmental price is essential for new franchise areas but not for existing well-established distribution areas. For new franchise areas, a developmental price offering relief from demand charge obligations reduces the risk taken by the distributor in contracting for new sales, and as a result, the distributor will be more willing to enter into supply contracts. A developmental price has another desirable effect; under the sales incentive generated, a pipeline system will attain a higher load factor more quickly, thereby reducing average unit costs of transmission and distribution.

Proposals for developmental prices were submitted by Dome Petroleum Limited, TQM and TransCanada. All were basically similar and in the Board's view would achieve the desired effect.

The Board has weighed all of the evidence and recommends the following scheme of developmental pricing for new franchise areas:

1. for the initial three years of each contract, the developmental price to be equal to the price for CD service at 100 percent load factor at the prescribed price in the particular zone, notwithstanding the distributor's actual load factor;

2. successive new contracts would contain the same feature of a developmental price, thereby providing a continous rolling term, but quantities of gas sold would be applied to existing contracts, up to their contract demand quantities, before any allocation would be made to a new contract;
3. TransCanada would record in its books of account the demand charges not recovered and submit billings to the Federal Government for reimbursement of such charges (see Section 5 - Financial Assistance Programs); and
4. it is further recommended that a review of the scheme of developmental pricing be made after five years for the Minister's consideration, but, despite any changes in the scheme resulting from the review, the industry would be assured that all existing contracts containing developmental clauses would continue for the unexpired portion of their three-year developmental pricing term.

The foregoing is a broad description of a simple developmental pricing scheme which the Board believes would be effective in achieving a higher load factor at an earlier date than would otherwise be the case for the transmission and distribution systems. Precise details would need to be worked out in consultation with interested parties.

4. Pricing Various Types of Service

Link to the Past

By and large, distributors and other interested parties appeared to be satisfied with the equitable and efficient manner in which the traditional cost-based Mcf-mile method of transmission cost allocation had operated on the TransCanada system in the past and

therefore proposed that this same pricing methodology be continued in the future. The Board concurs with this view.

Three-Part Pricing

The Board proposes that the three-part pricing scheme, which consists of the Alberta border price plus transportation demand and commodity tolls approved under Part IV of the NEB Act, be retained.

One Integrated System

The Board proposes that TCPL and TQM be regarded as one integrated pipeline system for cost allocation and hence pricing purposes.

Zones

The Board believes at this time that the existing zone system should be retained for pricing purposes but that sub-zones be established for cost allocation purposes:

- the extended Eastern zone should be subdivided into three sub-zones;
- the present Eastern zone, including the existing TransCanada interconnections with Gaz Métro in the Province of Quebec, should constitute a new sub-zone named TCPL (Eastern Ontario/Quebec) sub-zone;
- a new sub-zone should be created for TQM delivery areas in the Province of Quebec and named TQM (Quebec) sub-zone; and
- a new sub-zone should be established for New Brunswick and Nova Scotia and named TQM (Maritimes) sub-zone.

(Note: A possible alternative method of dividing the Eastern zone into sub-zones along provincial boundary lines is discussed in a later section of the report, entitled "Further Consideration re Eastern Zone").

Zone Differentials

Zone differentials in prices have traditionally been based on the cost of transportation from one zone to another.

At the inquiry, an alternative to the traditional cost allocation method was proposed by Dome Petroleum Limited, which advocated a pricing scheme whereby the zone differentials would be based on the cost of transporting oil rather than gas, thereby tying the price of gas to that of oil in each zone. This proposal would significantly increase the price of gas in Manitoba, where it is already exposed to severe competition from hydro-generated electricity, and in Saskatchewan where the consumption of Alberta gas is low but the sensitivity to price increases is high. The Board believes that the well-established system of cost-based zone differentials should be continued.

With respect to the proposed new sub-zones in the Eastern zone, the Mcf-mile cost allocation will result in higher costs in the TQM (Quebec) and the TQM (Maritimes) sub-zones compared to the TCPL (Eastern Ontario/Quebec) sub-zone. However, the NEP and the Minister's policy statement indicates that from Toronto to Halifax the price for the same kind of service will be the same. Therefore, the Board proposes that the Federal Government pay the subsidy required to equalize prices for gas in the new TQM (Quebec) and TQM (Maritimes) sub-zones with prices in the TCPL (Eastern Ontario/Quebec) sub-zone.

CD Service

Effective 1 September 1981, the Natural Gas Prices Regulations, 1980 were amended to reduce the imputed Alberta border price, although no change was made in the prices at which TransCanada would sell gas for consumption in Canada outside Alberta. While the result of that amendment was to introduce some "tilt" in the prices charged for CD service gas, it was considered desirable to avoid minor price changes pending completion of the gas pricing inquiry.

Prior to 1 September 1981, all TransCanada's fixed transportation costs were recovered through the transportation demand rate component of the prescribed prices. During the inquiry most participants proposed the continuation of this procedure, although there were some suggestions that the costs should be "tilted" for pricing purposes by reducing the demand component and increasing the commodity component of the price. Tilting of the rates reduces the risk to the distributor and its incentive to strive for a higher load factor, but, if take or pay obligations are not reimposed under these circumstances, tilting increases the risk to the transmission company. The Board was not persuaded with respect to this proposal, and it believes that the system of allocating all fixed costs to the demand component of the price should be retained.

Authorized Overrun Interruptible Service ("AOI")

AOI service is generally available whenever spare pipeline capacity is available. Since December 1975, AOI has been priced either at the incremental cost (the cost of gas plus incremental pipeline costs such as fuel) or at the CD level at 100 percent load factor. The former prevails at the moment and assists in serving

industrial interruptible sales. However, should developmental pricing be approved at the price level of CD service at 100 percent load factor, AOI should not, in the Board's view, be priced below that level. Furthermore, AOI service should not be available to customers who have not met their full developmental contractual obligations under CD service. The Board, therefore, recommends that AOI service be priced equal to CD service at 100 percent load factor.

Other Services

Based on the evidence in the inquiry, the Board found no reason to recommend a change from the existing basis for determining the price for Annual Contract Quantity Service (ACQ), Temporary Winter Service (TWS), Peaking Service (PS), or Small General Service (SGS).

5. Scheme of Pricing

It is apparent that, as a result of the September Federal/Alberta Agreement, a different scheme of regulation for natural gas pricing in the domestic market will be necessary.

At the conclusion of Phase I of the hearing (TCPL's Rate application), the Board observed that, in view of the Minister's policy statement, it was of questionable utility to make any order under Part IV of the NEB Act in relation to the rates to be charged for gas sold by TransCanada for consumption in Canada. To attempt to establish new rates for the gas sold by TransCanada, which would be inconsistent with the prices presently in force under Part III of the PAA would have been futile given that the effect of Section 63 of the

PAA is to establish the paramountcy of prices established under that Act. In view of the decision contained in the Minister's policy statement that the prices for natural gas under Part III of the PAA would no longer be derived from rates developed under Part IV of he NEB Act, it seems certain that even were the Governor in Council to change the prices prescribed under the PAA, they would necessarily differ from those determined under Part IV of the NEB Act.

The Board therefore declined to make an order under Part IV of the NEB Act in relation to the tolls or rates to be charged in respect of natural gas sold by TransCanada in Canada. In so doing, however, the Board concluded with the observation that, in the event that the PAA prices may from time to time be changed by the Governor in Council, TransCanada should, in accordance with Section 51 of the NEB Act, file amended tariffs reflecting these new prices.

Having considered its specific findings and recommendations as identified in earlier sections, and in view of the effect of the September Federal/Alberta Agreement, it is the Board's view that the new scheme might operate in the following manner:

Regulation of TCPL and TQM under Part IV of the NEB Act

Upon application, the Board could approve, under Part IV of the NEB Act, transportation tolls applicable to gas purchased and resold by TCPL on the TCPL/TQM transmission system, together with transportation tolls applicable to gas transported for other shippers.

In calculating transportation tolls, the Board could treat TCPL and TQM as one integrated system for cost allocation purposes, and employ the traditional zoned Mcf-mile rate-making methodology. The transportation tolls would be cost-based and designed to recover an approved total cost of service for the integrated TCPL/TQM transmission system.

The transportation tolls thus approved would be incorporated in tariffs filed with the Board under Section 51 of the NEB Act, except where different prices have been prescribed under the PAA, i.e. developmental prices and equalized prices in the two easterly sub-zones. In the case of domestic gas sales, the transportation tolls would be included as the transportation component of the sales prices. For export sales, the transportation tolls would be included in pricing orders made pursuant to Part III of the PAA.

Domestic Sales Prices Prescribed Under Part III of the PAA

During the term of the September Federal/Alberta Agreement (1 November 1981 to 31 January 1987), Alberta-produced gas destined for domestic markets outside of Alberta will be priced at the Alberta border at prices specified in the Agreement. The combination of the Alberta border price plus demand/commodity transportation tolls approved under Part IV of the NEB Act would effectively establish cost allocation prices which would apply to virtually all sales east of Alberta. These cost allocation prices could then be prescribed under Part III of the PAA except in the TQM (Quebec) and TQM (Maritimes) sub-zones, where the prices prescribed would be the same

as the prices prescribed for the TCPL (Eastern Ontario/Quebec) sub-zone. This is consistent with Federal Government policy which requires that prices be the same from Toronto to Halifax. The Board anticipates that the prescribed prices would be incorporated into sales contracts and tariffs, as would developmental prices as prescribed.

Financial Assistance Programs

The Board believes that financial assistance provided by the Federal Government should be clearly identified by purpose and administered through separate programs.

It is the Board's recommendation that:

1. financial assistance for the purpose of reducing transmission costs should reduce the authorized cost of service used to establish cost-based transportation tolls for the integrated TCPL/TQM system; and
2. financial assistance for purposes of establishing either developmental prices or prices below cost-based transportation tolls in the TQM (Quebec) and the TQM (Maritimes) sub-zones should neither reduce the total authorized cost of service nor otherwise be a factor in the determination of the cost-based transportation tolls established under Part IV of the NEB Act.

More specifically, in respect of any financial assistance that may be available from the Federal Government for purposes of reducing some or all of the wholesale prices for natural gas sales on the TCPL/TQM system, the Board recommends that the Federal Government establish three programs, each to be administered separately, in the following ways:

1. Transmission Subsidy Program

Under a transmission subsidy program any financial assistance granted by the Federal Government to the transmission system, whether a capital contribution or a revenue contribution, would reduce the authorized cost of service used to establish cost-based transportation tolls under Part IV of the NEB Act.

2. Price Equalization Program

Pricing policy under the NEP provides that prices east of Montreal will be the same as those in the traditional Eastern zone. Therefore, a new set of prices - called equalized prices - could be established for the TQM (Quebec) and the TQM (Maritimes) sub-zones. These equalized prices would be set at the level of prices in the TCPL (Eastern Ontario/Quebec) sub-zone. Therefore, the same prices would be prescribed throughout the Eastern zone under Part III of the PAA. Prescribed prices would be incorporated into TCPL's approved tariff. For sales in the TQM (Quebec) and the TQM (Maritimes) sub-zones, TCPL would charge the prescribed prices and record in a separate account the difference between the revenues which would have been received under cost allocation prices derived for the sub-zones and the revenue which is actually received under the prescribed prices, together with carrying charges approved by the Board. The account balance, representing unrecovered costs, would be cleared through payments (revenue contributions) to TCPL by the Federal Government under a price equalization program.

3. Developmental Price Program

Developmental prices would be prescribed under Part III of the PAA and incorporated into TCPL's tariff. TCPL would charge the prescribed developmental prices and record in a separate account the difference between the revenue which would have been received under the non-developmental prices (prescribed for CD service) and the revenue which is actually received under the prescribed developmental prices for CD service, together with carrying charges approved by the Board.

This account balance, also representing unrecovered costs, would be cleared through payments to TCPL by the Federal Government under a developmental price program.

Specific administrative details and procedures would need to be established in consultation with interested parties.

Further Consideration re Eastern Zone

The proposal for zoning for Eastern Canada has been based on the existing Eastern zone which embraces Eastern Ontario and a small part of Western Quebec, including Montreal. The Board believes that the sub-zones for the Eastern part of the pipeline might be more appropriate if the limits of the sub-zones were set at provincial boundaries so that the three sub-zones of the Eastern zone would be the Eastern Ontario, Quebec and Maritimes sub-zones respectively. This proposal was not examined at the public hearing, and the Board is not, therefore, prepared to make a firm recommendation at this time for this definition of the sub-zones. It is, however, a suggestion to which the Minister may wish to give consideration.

In the event that this suggestion were to be adopted, the price equalization program could also be applied to T-Service, currently purchased by Gaz Métropolitain, inc. This would operate to ensure the parity relationship in the Eastern zone between the prescribed price for gas purchased under CD service and gas purchased at the Alberta border and delivered in the Eastern Zone under T-Service.

APPEARANCES

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A. Hollingworth Commission	Alberta Petroleum Marketing
N.D. Shende	Attorney General of Manitoba
E.J. Smith	Ministry of Energy for Ontario
J. Giroux	Procureur Général de la province de Québec
J.D. Anderson	Gulf Canada Limited
H.D. Wasden	Mobil Oil Canada, Ltd.
W.F. Muscoby) J. Zych)	Texaco Canada Resources Limited
S. Taylor	Westcoast Transmission Company Limited
L.E. Smith) R.G. Makuch)	National Energy Board

NATIONAL ENERGY BOARD
OTTAWA, ONTARIO
K1A 0E5

CANADA

OFFICE NATIONAL DE L'ÉNERGIE
OTTAWA, ONTARIO
K1A 0E5

File No. 1562-T1-14
June 4, 1981

MEMORANDUM TO ALL PARTIES

Re: IN THE MATTER OF an application by TransCanada PipeLines Limited for certain orders respecting rates and tolls under Sections 50, 52, and 53 of the National Energy Board Act and for certain orders under Section 53 of the Petroleum Administration Act, filed with the Board under File No. 1562-T1-14.

Part III of the Petroleum Administration Act confers authority upon the Governor in Council to prescribe prices at which various kinds of gas produced in a producer-province are to be sold on or for delivery in any areas or zones in Canada outside the producer-province. Since November 1, 1975, the Governor in Council has prescribed the prices at which TransCanada PipeLines Limited sells gas acquired in the Province of Alberta to various distributors in provinces east of Alberta.

On April 14, 1981, the Minister of Energy, Mines and Resources issued a Policy Statement, a copy of which is attached, which sets out the policy objectives and guidelines for the pricing of natural gas in the domestic market under the Petroleum Administration Act.

In a letter received by the Board on May 19, 1981, the Minister of Energy, Mines and Resources requested that the Board, in conjunction with the TransCanada PipeLines Limited application noted above and in view of his April 14, 1981, Policy Statement, ". . . inquire into and report (upon) . . .:

- the necessity for developmental prices in the domestic market in Canada, and

- any other matters relevant to the pricing of natural gas in the domestic market."

By Order No. RH-4-81, the Board announced that it would hold a public hearing commencing on June 29, 1981, concerning TransCanada's tolls and tariffs (Phase I) and that it would also inquire into the pricing of natural gas in the domestic market in Canada, including the necessity for developmental pricing (Phase II). Under the terms of Order No. RH-4-81, direct evidence in respect of both Phases of the Hearing was to be submitted by the Applicant by June 5, 1981, and by all other parties by June 23, 1981. The Board, having reconsidered the timing for the submission of direct evidence for Phase II of the Hearing, has issued Order No. AO-1-RH-4-81, a copy of which is attached, which changes the deadline for submissions by all parties in respect of Phase II of the Hearing to Monday, July 6, 1981.

In 1981 and 1982, sales of gas produced in Alberta will be made at various points on the existing TransCanada PipeLines Limited system to Montreal and will likely be made at various points on the pipeline facilities between Montreal and Quebec City authorized by Certificate of Public Convenience and Necessity Nos. GC-64 and GC-65.

Without limiting the scope of the evidence which parties may wish to present respecting the pricing of gas sold to various distributors at points on those pipeline facilities, the Board considers it desirable that the following issues be addressed in the Phase II evidence:

1. Developmental Pricing in Existing Gas Distribution Franchised Areas

Developmental pricing could, under certain circumstances, generate new gas sales in existing franchised areas. The new sales could come either through the accelerated growth of sales within existing marketing regions or through the extension of current distribution areas to new geographic regions for new market development.

Parties are requested to provide evidence concerning the additional gas sales that could be generated by developmental pricing within existing franchised areas, within the following guidelines:

(a) The additional gas sales are to be those volumes obtainable through developmental pricing above a "base case" level of sales expected to result from the planned gas-oil pricing relationship outlined in the National Energy Program.

(b) Developmental prices are to be set as a percentage below the price for CD service assumed in the base case and would be in place for a three-year period commencing on November 1, 1981. Parties are requested to provide the base case prices and the base case volumes assumed for each marketing region. The developmental prices are to be assumed to be set at levels 5 percent, 10 percent, and 15 percent below the base case price in each of the development period years. Additional cases, if deemed to be appropriate, may be submitted.

(c) The evidence covering the additional sales volumes to be generated over and above the base case as a direct result of the developmental pricing is to be provided in tabular form for each year of the three-year developmental period, and is to be listed by market sector, showing the additional volumes for each year by residential, commercial, firm industrial and interruptible industrial markets.

(d) The information is to differentiate between:

(i) additional sales within existing marketing regions, and

(ii) additional sales from the extension of distribution areas to new geographic regions, specifying the new regions.

2. Developmental Pricing in New Gas Distribution Areas Serviced by Transmission Pipelines that have been Authorized by the Board

Developmental pricing may be required to assist distributors penetrate gas markets in areas where new gas transmission pipelines have been authorized by the Board.

For these new marketing areas, parties are requested to provide evidence concerning the additional gas sales that could be generated with developmental pricing, within the following guidelines:

(a) The additional gas sales are to be those volumes obtainable through developmental pricing above a "base case" level of sales expected to result from the planned gas-oil pricing relationship outlined in the National Energy Program.

(b) Developmental prices are to be set as a percentage below the price for CD service assumed in the base case and would be in place for a three-year period commencing on November 1, 1981. Parties are to provide the base case prices and the base case volumes assumed for each year. In the analysis, developmental prices are to be used for the sales volume calculations at levels 5 percent, 10 percent and 15 percent below the base case price in each of the development period years. Additional cases, if deemed to be appropriate, may be submitted.

(c) Parties are requested to provide in tabular form the annual sales volumes to be generated over and above the base case volumes as a result of the developmental pricing during each year of the three-year period.

(d) The additional volumes should be listed by market sector, showing the additional volumes for each year by residential, commercial, firm industrial and interruptible industrial.

3. CD Service Zone Differentials

In the Minister's Policy Statement of April 14, 1981, it is stated that:

> Natural gas prices in zones west of the TransCanada PipeLines eastern zone will be linked to the Toronto city-gate price, but will be somewhat lower recognizing lower transportation costs.

Parties are requested to identify alternatives for setting differentials between zones for Contract Demand (CD) service.

4. Demand Charge

In the Minister's Policy Statement of April 14, 1981, it is also stated that:

> Prices will be prescribed as two-part prices with a demand and commodity component. The commodity component will include the cost of gas.

Parties are also requested to identify alternatives for setting the demand charge component of prices for CD service.

5. Prices for Services other than CD Service

The Board has also requested that parties provide evidence respecting appropriate methods for setting prices for the following classes of service in zones east of the Alberta border:

(a) Annual Contract Quantity (ACQ) Service;

(b) Small General Service (SGS);

(c) Authorized Overrun Interruptible (AOI) Service;

(d) Temporary Winter Service (TWS); and

(e) Peaking Service (PS).

Yours truly,

G. Yorke Slader,
Secretary

Encls.

From the Office of the Minister

81/51

April 14, 1981

POLICY STATEMENT ON DOMESTIC NATURAL GAS PRICING

The National Energy Program establishes a natural gas pricing policy which will encourage consumers to use natural gas in preference to oil. In accordance with this policy, prices for natural gas shipped interprovincially, for all centres east of Alberta, will be set in accordance with the following guidelines:

1. For the purpose of pricing, the existing TransCanada PipeLines eastern zone will be extended to include the area to be served by the planned eastern extension of the pipeline system.

2. Natural gas price in markets east of Toronto will be the same as the price at the Toronto city-gate for the same type of gas service.

3. Natural gas prices in zones west of the TransCanada PipeLines eastern zone will be linked to the Toronto city-gate price, but will be somewhat lower recognizing lower transportation costs.

4. There will be a uniform imputed Alberta border price for all natural gas produced in Alberta and consumed in Canada outside that province, and for fuel used in transmission on the Great Lakes system for gas transported back to Canada.

Development prices may be necessary, at least in new markets, in order to achieve the National Energy Program (NEP) objective of increased natural gas sales in Canada. Accordingly, the National Energy Board (NEB) will be asked to examine this subject and to report on the matter of development prices.

- more -

All prices will be prescribed by the Governor in Council, on the advice of the National Energy Board, under Part III of the Petroleum Administration Act rather than being derived from rates developed under Part IV of the National Energy Board Act as is the case now. The Minister of Energy, Mines and Resources will periodically request the NEB under Part II of the National Energy Board Act to review and report on matters associated with the pricing of natural gas sold in the domestic market.

The existing three-part pricing system, which consists of the imputed Alberta border price plus transportation demand and commodity rates, will remain in effect until 30 June 1981. Effective 1 July 1981, the same prices will be prescribed as two-part prices with a demand and commodity component. The commodity component will include the cost of gas at the imputed Alberta border price.

Imputed Alberta Border Price

TransCanada PipeLines and Trans Quebec and Maritimes Pipeline will be considered as one integrated pipeline system, and the imputed Alberta border price will be established by the Minister under Part III of the Petroleum Administration Act based on the following formula:

a) the total revenues received by TransCanada PipeLines and Trans Quebec and Maritimes Pipeline for all domestic sales and export sales (excluding the export flowback) and transportation services provided to others east of Alberta;

less

b) the total cost of transmission and metering and all other costs associated with the movement of gas on the integrated system as approved by the NEB;

and the result divided by:

c) the total domestic and export sales volumes of TransCanada PipeLines and Trans Quebec and Maritimes Pipeline east of Alberta.

For the purpose of the above formula, export flowback means that part of the revenue received by TransCanada PipeLines and Trans Quebec and Maritimes Pipeline from export sales which exceeds the aggregate of the imputed Alberta border price as determined by the formula and the costs of transportation from the Alberta border to the points at which TransCanada PipeLines and Trans Quebec and Maritimes Pipeline deliver the gas for export.

NATIONAL ENERGY BOARD

OFFICE NATIONAL DE L'ÉNERGIE

ORDER NO. AO-1-RH-4-81

IN THE MATTER OF the National Energy Board Act and the Regulations made thereunder; and

IN THE MATTER OF an application by TransCanada PipeLines Limited (hereinafter called "the Applicant") for certain orders respecting rates and tolls under Sections 50, 52, and 53 of the National Energy Board Act and for certain orders under Section 53 of the Petroleum Administration Act, filed with the Board under File No. 1562-T1-14.

B E F O R E the Board on Tuesday, the 2nd day of June, 1981.

UPON the Board having, by Order No. RH-4-80 dated the 19th day of May, 1981, set down for a public hearing to commence on the 29th day of June, 1981, that part of the application made by the Applicant under sections 50, 52, and 53 of the National Energy Board Act together with the inquiry, pursuant to subsection 22(2) of the National Energy Board Act, into any matters relevant to the pricing of natural gas in the domestic market in Canada, including the necessity for developmental prices;

AND UPON the Applicant having, by a letter dated the 26th day of May, 1981, requested, inter alia, that it be permitted to file its written direct evidence with respect to Phase II of the hearing on the 23rd day of June, 1981.

AND UPON the Board having reviewed the filing requirements in relation to Phase II of the said hearing;

IT IS ORDERED THAT Order No. RH-4-81 be and the same is hereby changed, altered, and varied by revoking paragraphs 5 to 7 of the said Order and substituting therefor the following:

"5. The Applicant shall prepare its written direct evidence in question and answer form with lines numbered (hereinafter called "written direct evidence") for each of its witnesses for Phase I of the Hearing and shall,

(a) on or before the 5th day of June, 1981, file thirty (30) copies thereof with the Board and serve one (1) copy of the same upon each person specified in Appendix I to this Order, and

(b) as soon as possible, serve one (1) copy of the same upon any other party who has intervened pursuant to paragraph 4 of this Order.

6. Any party who has intervened pursuant to paragraph 4 hereof and who wishes to present direct evidence in Phase I of the Hearing, shall prepare written direct evidence, and shall, on or before the 23rd day of June, 1981,

file thirty (30) copies thereof with the Board and serve (1) copy of the same upon the Applicant and each other party who has intervened pursuant to paragraph 4 hereof.

6.1 Any party to the Hearing, including the Applicant, who wishes to present direct evidence in Phase II of the Hearing, shall prepare written direct evidence, and shall, on or before the 6th day of July, 1981, file thirty (30) copies thereof with the Board and serve one (1) copy of the same upon each other party to the Hearing.

7. The Applicant or any party who has intervened pursuant to paragraph 4 or prepared written direct evidence pursuant to paragraphs 5, 6, or 6.1, shall file proof of service of his application, intervention, or written direct evidence, as the case may be, at the opening of the Hearing."

NATIONAL ENERGY BOARD

G. Yorke Slader
Secretary

APPENDIX III

OBSERVATIONS ON GRANTS TO EXPAND DISTRIBUTION SYSTEMS

The National Energy Program identified the need for market development bonuses to aid in the rapid expansion of gas distribution systems. In addition, a Distribution System Expansion Program ("DSEP") has been initiated by the Federal Government to provide incentives to distributors for the expansion of their systems into marketing areas that would otherwise be considered uneconomic. Although DSEP was not included as part of the Board's memorandum of 4 June 1981 dealing with the evidence to be heard in Phase II, as it was recognized that these matters were being discussed between the industry and the Department of Energy, Mines and Resources ("EM&R"), a considerable amount of testimony, both written and oral, was devoted to it. The various proposals dealing with this subject recommended that capital assistance, such as that proposed by DSEP, should be provided to distributors to assist in the capture of additional markets that would otherwise not be attachable, because it would not be economically feasible to do so.

The Board is of the view that in furtherance of the official policy to encourage the use of natural gas, incentives in the form of capital grants for aid in construction are desirable to provide gas service to new communities beyond existing distribution networks. The Board is also of the view that consideration should be given to the merits of grants to expand and upgrade existing distribution facilities and in order to attach new customers within currently serviced regions (infilling). The Board is, however, aware that the question of grants to expand distribution systems is under study by EM&R at this time and, therefore, is restricting its advice to that provided in this paragraph.